# Academic Expectations as Correlates of Secondary School Students' Academic Achievement

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Abstract: Students may form expectations, which may influence their academic achievement either positively or negatively. The main objective of the study was to find out if academic achievement was related to academic expectations. The research was guided by the Expectancy Value theory. The participants were 585 students (315 males, 270 females). The participants completed the Academic Expectancy Scale while academic achievement was obtained from the participants' academic records. The major finding was that academic expectations were significantly correlated to academic achievement. Taking into account that students can form biased academic expectations, the study made recommendations to the stakeholders on intervention measures. They included encouraging and helping students form positive academic related beliefs. The researcher also recommended for further research in the area of academic expectations.

Keywords: Academic expectations, Academic achievement, Correlates, Expectancy

#### 1. Introduction

Education serves as a means of promoting the values and development of the individual and contributes to the general transformation of society [1]. Examinations are important tools for monitoring systems of education and are an integral part of the education system and yet the number of candidates passing the national examinations has declined. Academic failure can undermine the individual's life course and has ramifications for larger social problems because increase in the rates of academic failure could have serious consequences for the stability of society. Even though measures have been taken to improve quality of secondary education in Kenya majority of the students continue performing poorly in national examinations.

Researchers have studied various factors that have been identified as possible contributors to the variations in academic achievement. Liew [2] noted that predictors of academic achievement were parental education, family structure, students' educational expectations and perceived usefulness in the subjects. Other researchers reveal that factors such as the student's self-concept, academic resilience, students' attitudes, teachers' factors and achievement motivation amongst others [3, 4, 5 & 6] have been considered important in the understanding and prediction of students' academic behavior. Numerous empirical studies and theoretical frameworks have shown that the students' expectations influence their actual academic achievement. Academic expectations are either the positive or negative academic related beliefs that students make about their future academic performance.

Studies have shown that student's expectations are positively associated with achievement and other forms of academic behavior such as less behavior problems, greater investment in schools and reduced likelihood of dropping out[7, 8]. Learners who predict that they will do well develop confidence and set high standards for themselves, which foster their self-efficacy and enable them to achieve consistently. However, students who perceive they are poor performers generate failure expectations, low aspirations and low perseverance while working on assignments thus, damage their self-worth. This prohibits them from achieving their full academic potential. It is therefore, necessary to find out which students may be at heightened risk of using negative expectations and expectation biases. Although these expectation biases are associated with maladaptive behavior they are flexible and can produce positive outcomes by being altered. This can be done through encouraging the failing students to overcome their academic expectation biases.

However, the few studies carried out on how students' academic expectations affect their academic achievement have been mainly conducted outside Kenya. The findings may thus not be generalizable to the Kenyan population as well as contextual experiences. The current study proposed to address this gap. It also extended these previous studies by providing empirical data from the population of study.

#### 2. Literature Survey

#### **Expectancy Value Theory (Eccles, 1983)**

The study was anchored on the expectancy value theory. Eccles [9] expanded Atkinson's [10] expectancy-value model into the field of education. The expectancy-value model offers a multidimensional approach to describing student motivation within educational contexts. The model examines how students develop expectancies for success, subjective task values, achievement goals and competence beliefs. The expectancy theory proposes that people choose to behave in certain ways or work toward certain goals instead of others.

According to this theory, two factors determine achievement and achievement related choices of the students. They include expectancy for success as well as subjective task values. Expectancy refers to confidence of the individual in his or her ability to succeed in a task whereas task values refer to usefulness of the task to the individual. Students need to believe that they can succeed by having positive expectations. They also need to perceive an important reason to engage in the behaviour by

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having positive values. The students' academic expectations may thus be associated with different forms of academic behaviour. A student who believes that he/she really strains on a standardized test will more likely score poorly on the test. Their actual performance on the test is therefore, influenced by these beliefs.

This theory hypothesizes that positive and negative academic expectations are crucial components for influencing achievement related behaviour. Several studies suggest that expectancy and task values interact to predict important outcomes like. academic achievement. continuing interest, and engagement [11, 5]. This model is thus, suitable for investigating how academic expectations relate to academic achievement as hypothesized in this study. The researcher's main concern was on students who form biased, potentially inaccurate and harmful academic related beliefs. Such students may develop low aspirations, failure expectations, thus delimiting them in achievement striving.

#### Academic Expectations and Academic Achievement

Studies have highlighted the importance of academic expectations in the development of perceived competence and engagement among students. The perception of students of their ability to succeed is significant to their academic achievement. The expectations and assumptions that students make or have about their potentials should have tangible effect on their academic achievement. Generally, research suggests that expectancies are strong predictors of student achievement [12-14]. A reciprocal between students' achievement relationship and expectations has been established theoretically and empirically [15, 16, 14]. Students have self-expectations and their academic achievement is significantly influenced by these expectations. Pupils with high expectations performed better than pupils with low expectations. Empirical evidence further indicates that expectancies and task-values are related to academic choices and achievement.

Ichou [11] using a longitudinal study in China investigated the expectations and achievement in students' academic trajectories. The researcher followed a cohort of 15, 770 middle school students until they turned 20 years old. The study reported a high correlation between academic achievement and educational expectations. The educational expectations and academic achievement were strongly positively correlated and very unequally distributed between students of different social backgrounds. This study shows that students with either higher aspirations or high expectations have higher school achievement than those with both low aspirations and low expectations.

Similary, Khattab [17], using a longitudinal study in England (LSYPE) examined how different combinations of aspirations, expectations and school achievement influenced university students' future educational behaviour. The students were aged 17 to 18 years. The findings revealed that students who had either high aspirations or high expectations also had higher achievement than those with both low aspirations and low expectations. On the other hand, Levi et al [18] studied adolescents' hope, academic expectations and average grades. The sample consisted of 289 high school students. The results demonstrated that hopeful thinking had a direct effect on grade expectations, which in turn predicted academic achievement.

Other studies have investigated the role of expectancy constructs in achievement [16]. These studies have used both cross-sectional and longitudinal designs on their selfperceptions of ability and expectancy for success in Math and English. These studies have consistently shown that students' self-perceptions of their ability and expectancies for success are the strongest predictors of subsequent grades in Math and English. These self-perceptions are even better predictors of later grades. These findings highlight the importance of students' expectancies and selfperceptions of competence as mediators between the environmental context and actual achievement behaviour.

The study on expectations by Hattie [7], emphasizes on the power of high expectations in closing achievement gaps. The findings reveal that the students' belief standards should not be lessened for students with perceived disadvantages. These findings underline the fact that not only do students' achievement outcomes support the idea of establishing high expectations for all students, but also the learners themselves appreciate the effectiveness of setting equal, high expectations for both themselves and their peers. The study suggests that expectations shape the learning experience very powerfully. Higher expectations result in higher performance, and that persons with high expectations, even though their measured abilities are equal [20].

The study by Wigfield [16] examined children's ability beliefs and expectancies for success in music, math, reading and sports. The findings indicated that children's beliefs in every domain formed distinctive factors. The items measuring ability beliefs and expectancies for success in the domain characterized each factor. This domain differentiation occurred even for the first grade children in the study. Additionally, young children were able to differentiate between their ability related beliefs and subjective task values. The study further established that the children's ability- expectancy beliefs and subjective values formed clearly distinct factors within the domains of math, reading, music, and sports. These findings indicated that even during early elementary grades children have distinctive beliefs about what they are better at and the value in different domains of achievement.

In Kenya, the study by Mwangi [5] focused on predictors of academic achievement. High expectations were hypothesized as external predictors of academic achievement. The study was carried out in Kiambu County using a sample of 390 high school students. The researcher employed a descriptive correlational research design. The findings were that students with high expectations were likely to be academically resilient. High expectations were found to significantly positively predict academic achievement. The researcher argued that high expectations were important because they enabled the students understand they had the capacity to succeed. In another study, Mugo and Kibera [8] studied factors affecting motivation, academic expectations and aspirations of students in secondary schools in Laikipia county, Kenya. The study employed a survey research design with asample of 349 students (194 boys). Collection of data was carried out using self-structured questionnaires. The findings revealed that although all students expected higher academic achievement, boys hoped to attain better results than girls. The findings also established that students in single sexed secondary schools had slightly higher academic expectations and aspirations compared to students in co-educational secondary schools. Generally, majority of students had unrealistic academic expectations. Unfortunately, the researcher did not investigate whether the variable of academic expectations was correlated to academic achievement, a focus of the current study. The study was guided by the following objectives:

- 1. To describe the academic expectations of the participants.
- 2. To establish the relationship between academic expectations and academic achievement.
- 3. To determine the predictive weight of academic expectations on academic achievement

## 3. Methodology

The study employed correlational research design. Participants were 585 (320 boys and 280 girls) form three students. The participants were aged between 13-21 years (M=17, SD=8.7). The participants were drawn from 10 secondary schools in Kiambu County, Kenya. The researcher applied three types of sampling procedures namely, purposive, simple random and stratified. Purposive sampling was used to select Kiambu County. To select the 10 public secondary schools considered for the study, the researcher first used stratified sampling method. The public secondary schools were arranged into three groups based on their categories hence forming three strata namely national, extra-county and sub-county schools. This ensured equal representation of schools from each school category since each stratum was more homogeneous than the total population. The researcher got estimates that were more precise for each stratum, therefore, getting more reliable and heterogeneous information from the different strata. From the three groups (strata), the researcher used proportionate allocation to select 10 schools. Since the strata differed in sizes, this enabled the sizes of the sample to remain proportionate to the sizes of the strata. Proportionate allocation is considered highly efficient and favourable since it estimates the population value of some characteristics and ensures that there is no difference within stratum variance [20]. Simple random sampling was used to select the 585 students from the sampled schools. Relevant research authorization was sought before commencement of the study. All the participants were treated in accordance with the American Psychological Association (APA) Ethical code.

### 4. Instruments

The researcher developed the Academic Expectancy Scale, which had twelve items categorized into the expectations for future success (positive academic expectations) and the expectations for future failure (negative academic expectations). Academic expectations had two levels: positive and negative expectations. Construct validity was ascertained by conducting an exploratory factor analysis (EFA). Kaiser-Meyer-Olkin (KMO) Test was used to examine the sampling adequacy for each item and to assess the proportion of variance among the items. The respondents indicated their level of agreement by scoring on a five-point likert scale ranging from 1-strongly disagree to 5-strongly agree for positively worded items and vice versa for negatively worded items. A high score of above 5 for future academic success, denoted high expectations for future success or low expectations for future failure while a low score of below 5, for future academic failure denoted low expectations for future success and high expectations for future failure. The scores ranged from 6 to 30 for each subscale. The reliability coefficient for the Academic Expectancy scale was .73, which was higher than at the piloting .65. To measure the students' academic achievement, academic records were obtained from the school administration. It was based on Kenya National Examination Council (KNEC) criteria of scoring and grading. The mean score for the seven subjects was calculated and overall mean for two consecutive terms tabulated for each student. The mean scores were transformed into standardized scores to make them comparable among the students in different schools.

## 5. Results and Discussion

Based on the first objective a descriptive analysis was carried out with the purpose of getting the participants range, mean, standard deviation and skewness in the two levels of academic expectations. The results are presented in Table 1.

Table 1: Descriptive Statistics for Academic Expectations								
Variables	Range	Min	Max	М	SD	Sk	Kurt	
PAE	18.00	12.00	30.00	24.22	3.17	69	1.59	
NAE	48.00	6.00	54.00	16.25	5.40	.74	3.15	

Note. N= 585. PAE=positive academic expectations; NAE= negative academic expectations

As shown in Table 1 the positive academic expectations had the highest mean score (M=24.22, SD=3.17, Range=18) while negative academic expectations had the lowest mean (M=16.25, SD=5.40, Range=48). Positive academic expectations scores were negatively skewed meaning that many participants rated themselves highly contrary to negative academic expectations scores that were positively skewed meaning many students rated themselves lowly. The skewness and kurtosis for positive expectations were below three an implication that the scores were approximately normally distributed [21].In summary, the descriptive statistics indicate that students scored higher in the positive academic expectations than in the negative academic expectations. These findings suggest that students supported the idea of establishing

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high expectations for them and appreciated the effectiveness of setting equal, high expectations for themselves regardless of their academic ability. They may also have understood they had the capacity to succeed and this may have generated high expectations. The high ratings could also mean that the students may have harbored unrealistic expectations, which may not necessarily result to high academic achievement. The study on factors affecting motivation, academic expectations and aspirations found out that generally, majority of students had unrealistic academic expectations [8]. The present findings correspond with interpretations that students who had higher expectations after failure were eager to work hard and willing to make progress [18]. A student who believes that he/she really strains on a standardized test will more likely score poorly on the test. Their actual performance on the test is therefore, influenced by these beliefs.

#### **Hypothesis Testing**

## From the second objective, the first null hypothesis was formulated.

 $H_{01:}$  There is no significant relationship between students' academic expectations and academic achievement.

To make this hypothesis testable, the researcher formulated two supplementary hypotheses:

 $H_{01,1:}$  There is no significant relationship between students' positive academic expectations and academic achievement.

 $H_{01,2:}$  There is no significant relationship between students' negative academic expectations and academic achievement.

To test these hypotheses, scores for positive academic expectations and negative academic expectations and academic achievement scores were subjected to a bivariate correlational analysis using the Pearson product moment correlation coefficient. The results are shown in Table 2.

 
 Table 2: Correlation between Academic Expectations and Academic Achievement

Variables	1	2	3
1. PAE	-		
2. NAE	31**	-	
3. Acad. Ach	.28**	38**	-

Note. N=585; \*<sup>\*</sup>level of significant at .01; PAE= positive academic expectations; NAE= negative academic expectations; Acad. Ach= academic achievement.

Findings in Table 2 indicated a significant positive relationship between positive academic expectations and academic achievement (r (583) = .28, p<.01). This suggests that the more the students' portrayed positivity in their academic expectations, the higher the academic achievement scores and the less they showed positivity in their academic expectations the lower the academic achievement scores. Subsequently, the first supplementary null hypothesis, that there was no significant relationship between positive academic expectations and academic

achievement was rejected at p=0.05. It was therefore, concluded that there was a significant relationship between students' positive academic expectations and academic achievement.

Similarly, statistically significant negative correlation was established between negative academic expectations and academic achievement (r (583) = -.38, p<.01). This meant that the more the students portrayed negativity in academic expectations the lower the academic achievement scores and vice versa. Therefore, the second null hypothesis that there was no significant relationship between students' negative academic expectations and academic achievement was also rejected. The researcher subsequently concluded that there was a significant relationship between students' academic expectations and academic achievement.

On correlations, this study found out that students' academic expectations had a significant relationship with academic achievement. The findings were that positive academic expectations had significant positive relationship with academic achievement while negative academic expectations had significant negative relationship with academic achievement. These findings suggest that the students who perceived they were expected to perform poorly developed low aspirations, failure expectations, and lacked persistence in working on assignments. This would prevent them in achieving their full academic potential since it damages their self-efficacy. The present findings were consistent with the findings that found the existence of a reciprocal relationship between students' achievement and expectations. Students had self-expectations, which significantly influenced their academic achievement [15, 16].

The current findings were in agreement with the work by Hattie and Dweck [7] which emphasized on the power of high expectations in closing achievement gaps. Their study suggests that expectations shape the learning experience very powerfully by arguing that higher expectations resulted in higher performance, and that person with high expectations were a higher level than those with low expectations. The current study findings corroborate those of Ichou [11] who used a longitudinal study to investigate the expectations and achievement in students' academic trajectories using a cohort of 15, 770 middle school students until they turn 20 years old. The study's findings were that the correlation between academic achievement educational expectations is relatively and high. Expectations and academic achievement were strongly positively correlated and very unequally distributed between students of different social backgrounds.

The study findings were consistent with those that found that expectancy beliefs strongly influenced achievement [22, 23]. Further, the study results support those by Levi et al [18] whose results demonstrated that hopeful thinking had a direct effect on grade expectations, which in turn predicted academic achievement. The current findings however, negate those by Onduso's [24] who observed that students had low expectations in comparison to the teachers, which the researcher attributed to low performance in the mathematics achievement. The

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teachers had high expectations regarding students' future performance while the students were more satisfied with the scores.

## From the third objective, the second null hypothesis was formulated.

 $H_{02:}$  There is no significant predictive weight of students' academic expectations on academic achievement.

Since the academic expectations were in the levels of positive academic expectations and negative academic expectations, a linear regression analysis was performed to establish the differential contribution of both levels to the variance in academic achievement and the extent to which the different levels predicted academic achievement. Table 3 shows the summary of the stepwise regression analysis for the levels of academic expectations and academic achievement.

 Table 3: Stepwise Regression Analysis for Academic

 Expectations and Academic Achievement

	D	R <sup>2</sup>	Adjusted R <sup>2</sup>	Change Statistics					
	К			R <sup>2</sup> Change	F	df1	df2	Sig.	
1	.38 <sup>a</sup>	.14	.14	.14	96.31	1	583	.000	
2	.41 <sup>b</sup>	.17	.17	.03	19.96	1	582	.000	
Note.	N=	585	, <sup>a</sup> =negati	ve expectations; <sup>b</sup>		<sup>b</sup> =positive			
expectations									

Findings in Table 3 indicated that the adjusted  $R^2$  value of academic expectations was ( $R^2 = .17$ ). This implied that students' academic expectations explained 17% of the variations in academic achievement. The results also revealed the differential contribution of positive and negative academic expectations variables in explaining the variation in academic achievement. Negative expectations accounted for 14% of the variance ( $R^2 = .14$ ) while positive expectations explained 3% of the variation in academic achievement ( $R^2 = .03$ ). The results show that negative and positive academic expectations were significant predictors of academic achievement (F (2, 582) =59.70, p<0.05). The predictive weights of the levels of academic expectations on academic achievement are presented in Table 4.

**Table 4:** Beta Coefficients for Academic Expectations

		Unstanda Coeffic	ardized	Standardized Coefficients	t	Sig
		В	SE	Beta		~-8.
	(Constant)	46.17	3.61		12.80	.000
1	PAE	.56	.13	.18	4.47	.000
	NAE	60	.07	32	-8.11	.000

Note. N=585. PAE= positive academic expectations; NAE= negative academic expectations.

The results presented in Table 4 indicate that of the two levels of academic expectations, negative academic expectations were found to be the best negative significant predictors of academic achievement ( $\beta$ =-.32, p<.01) than positive academic expectations ( $\beta$ = 0.18, p<.01). A unit increase in negative academic expectations would lead to a - 0.32 decrease in academic achievement while a unit increase in positive academic expectations would lead to 0.18 increase in academic achievement. Based on these findings, the null hypothesis there is no significant predictive weight of students' academic expectations on academic achievement was rejected.

The results from the multiple regressions thus indicate that academic expectations were predictors of academic achievement. The negative academic expectations had negative significant prediction ability on academic achievement while the positive academic expectations had positive significant prediction on academic achievement. The findings are consistent with those which found out that high expectations were significant positive predictors of academic achievement since students with high expectations were likely to be academically resilient [5]. The current study findings suggest that the high expectations were important because the students understood that they had the capacity to succeed. Consistent with the findings are also those that found that higher expectations resulted in higher performance, and that persons with high expectations performed at a higher level than those with low expectations, even when their measured abilities were equal [17].

#### 6. Conclusion

In conclusion, regardless of the different methodologies, variations in cultural context and the different samples from the present study, this study found a relationship academic expectations and between academic Specifically a significant achievement. positive relationship was found between positive academic expectations and academic achievement while a significant negative relationship was established between negative academic expectations and academic achievement. This implies that academic expectations relate to the students' academic achievement in Kenya. When the students have positive academic expectations they are hopeful and strive to excel in academic achievement but when they hold negative academic expectations they develop low aspirations and lack persistence in academic tasks leading to low academic achievement. This knowledge may assist the teachers and parents to unravel and monitor potentially inaccurate and harmful academic related beliefs among the students and provide an opportunity for shaping students' beliefs about their performance. The school administration should come up with strategic intervention programmes that will help identify biases present in the students' formations of academic expectations so that they may not become barriers to attainment of good academic achievement. The researcher recommended for a replication of a similar study in other regions to allow for more comparison.

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